

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below. A complete listing of all pending claims is presented.

1. (Cancelled)

2. (Currently amended) An image display device, comprising:
a plurality of light-emitting diodes arranged by a predetermined arrangement
on an image display face;
a voltage detection portion for applying a constant current to said plurality of
light-emitting diodes in an off region at a forward voltage or less in accordance with an input
of a signal indicating a defect detection mode, and detecting a voltage between terminals of a
light emitting diode arising when the constant current flows there through; and
a defect detection portion for electrically detecting a defect from said plurality
of light-emitting diodes based on a detection result of said voltage detection portion [An
image display device as set forth in claim 1], wherein:
said voltage detection portion is provided to each of a plurality of drive
circuits connected in series in one direction for respectively driving a predetermined number
of said light-emitting diodes; and
said defect detection portion transfers data indicating said voltages between
terminals of said light-emitting diodes serially between a plurality of drive circuits in each
line of said drive circuits in the horizontal direction, and based on data output from a drive
circuit on the final stage being added with information of the voltages between terminals
every time it transfers between the drive circuits, detects said defect in every said line in the
horizontal direction.

3. (Original) An image display device as set forth in claim 2, wherein:
said voltage detection portion comprises
a current source connected in series with said light-emitting diodes; and
a comparator for comparing a voltage of one terminal of a light-emitting diode

changing in proportional to said voltage between terminals as a result that said constant current flows to said current source with an input reference voltage;

wherein said defect detection portion repeats said defect detection on a line in the horizontal direction of said drive circuit for a plurality of times while changing said reference voltage by steps.

4. (Original) An image display device as set forth in claim 3, wherein said defect detection portion comprises

a logic calculation unit for executing logic calculation on an output of said comparator corresponding to said predetermined number of light-emitting diodes and outputting a result of the logic calculation as binary data indicating an existence of a particularity with a probability of being said defect; and

a transfer register for adding said binary data output from said logic calculation unit to data input from a defect detection portion on the former stage and transferring to a defect detection portion on the subsequent stage.

5. (Original) An image display device as set forth in claim 3, wherein said defect detection portion measures a distribution of said voltages between terminals by detecting a defect for a plurality of times while successively changing said reference voltage by predetermined steps, and judges a light-emitting diode having a voltage between terminals positioned being away from an end on the low voltage side in said distribution of voltages between terminals as a short-circuited defect or a defect with a high probability of becoming short-circuited.

6. (Original) An image display device as set forth in claim 3, wherein said defect detection portion measures a distribution of said voltages between terminals by performing defect detection for said plurality of times while successively changing said reference voltage by predetermined steps, and judges a light-emitting diode having a voltage between terminals positioned being away from an end of the high voltage side in said distribution of voltages between terminals as an open defect or a defect with a high probability of becoming open.

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Currently Amended) A drive circuit device for driving a predetermined number of light-emitting diodes, comprising
a voltage detection portion for applying a constant current to said predetermined number of light-emitting diodes in an off region at a forward voltage or less in accordance with an input of a signal indicating a defect detection mode, and outputting data on voltages between terminals for electrically detecting a defect from said plurality of light-emitting diodes from a difference of voltages between terminals of light-emitting diodes arising when the constant current flows there through, wherein said voltage detection portion comprises a current source connected in series with said light-emitting diodes; and
a predetermined number of comparators for comparing a voltage of one terminal of a light emitting diode changing in proportional to said voltages between terminals as a result that said constant current flows in said current source with an input reference voltage [A drive circuit device as set forth in claim 9], and further comprising:

a logic calculation unit for executing logic calculation on outputs of said predetermined number of comparators and outputting a result of the logic calculation as binary data indicating an existence of a particularity with a probability of being said defect; and

a transfer register for adding said binary data output from said logic calculation unit to data to be input and outputting.

11. (Canceled)

12. (Canceled)

13. (Canceled)